

IN HONOR OF PAUL LEVENTHAL
AND THE 20TH ANNIVERSARY OF
THE NUCLEAR CONTROL INSTI-
TUTE

HON. EDWARD J. MARKEY

OF MASSACHUSETTS

IN THE HOUSE OF REPRESENTATIVES

Thursday, June 21, 2001

Mr. MARKEY. Mr. Speaker, I rise today in order to honor Paul Leventhal and the Nuclear Control Institute (NCI) which he founded 20 years ago. On June 21, 1981, a full-page ad in *The New York Times* entitled "Will Tomorrow's Terrorist Have an Atom Bomb?" announced the launching of NCI (then known as "The Nuclear Club Inc."). Over the past two decades, Paul and NCI have been working to safeguard us from the dangers of irresponsible and malicious use of nuclear materials. And for years prior to forming NCI, Paul played an absolutely crucial role as a Senate staff member, helping to abolish the Atomic Energy Commission and split its roles between the Nuclear Regulatory Commission and the Department of Energy, produce the Nuclear Non-proliferation Act, and direct the investigations of the Three Mile Island accident.

On April 9, 2001, Paul and NCI, in close collaboration with Marvin Miller of MIT, hosted an excellent 20th Anniversary Conference, "Nuclear Power and the Spread of Nuclear Weapons: Can we have one without the other?" That is, does the proliferation of nuclear power encourage the proliferation of nuclear weapons? Did it make sense to supply the Indian government with nuclear fuel for their power plant at Tarapur? Does supplying the North Korean government with 2,000 megawatts of power from light water reactors encourage or discourage their acquisition of nuclear weapons?

But the issue of nuclear power is not only on the international scale. To solve our current "energy crisis", we find that the Bush administration has called for an increased reliance on nuclear power in our country. While NCI is not a priori averse to nuclear power, they are concerned that it be used properly. And the United States has an obligation to set a good example. If we want to discourage other nations from using plutonium, then the United States should not regard MOX fuel as a viable source of power.

At the conference on April 9, a number of experts spoke to the gathering about nuclear power and nuclear weapons. The website www.nci.org/conference.htm contains the text of the addresses as well as brief interviews with a number of the speakers. I will highlight here only a couple of the notable participants in that forum.

Amory Lovins of the Rocky Mountain Institute presented energy conservation and efficiency measures that could save the United States three-quarters of its electric use—equivalent to four times current nuclear output and cheaper to install than current nuclear operating costs. These retrofits of the best existing technologies, he said, would offset any need for continuation or expansion of nuclear power.

Robert Williams of Princeton University, an expert on renewable and other non-carbon, alternative energy systems, underscored the fact that two-thirds of carbon-dioxide emissions, a major contributor to global warming,

come from non-electric sources, mainly transport. He pointed out that the replacement of all coal-fired electricity with nuclear capacity over the next century would only make a dent in global warming by reducing carbon emissions by just 20 per cent. Such an expansion of nuclear power, however, would generate plutonium flows of millions of kilograms a year for breeder reactors, which could prove an unmanageable proliferation danger.

The conference was an excellent opportunity to review the connections between nuclear power and weapons and to question the necessity for turning to nuclear power when the risks might outweigh the benefits. The conference was a testament to NCI's persistent dedication to the cause of keeping us safe from the potential dangers of nuclear materials.

Finally, Mr. Speaker, I would like to submit for the record a summary of the history and accomplishments of NCI over the last 20 years.

NUCLEAR CONTROL INSTITUTE

1981–2001; HISTORY AND ACCOMPLISHMENTS

Nuclear Control Institute was established in 1981 by its president, Paul Leventhal, as an independent oversight organization. It continues work he began on U.S. Senate staff to draw attention to the spread of nuclear weapons and to strengthen controls over U.S. nuclear exports and U.S.-origin fissile materials. His work contributed to the demise of the Joint Committee on Atomic Energy and to enactment of the Nuclear Non-Proliferation Act of 1978.

NCI was the first non-profit organized to work exclusively on the problem of nuclear proliferation. NCI's focus was then and remains today prevention, not simply management, of the spread of nuclear weapons. NCI works to eliminate civilian uses of atom-bomb materials, plutonium and highly enriched uranium (HEU), by calling attention to the dangers these fuels pose in advanced industrial countries as well as in the developing world. NCI seeks to break the linkages between civilian and military nuclear applications and to build linkages between nuclear disarmament and nuclear non-proliferation.

In a policy environment that often puts diplomatic and trade interests ahead of long-term security concerns, NCI works to promote bilateral and multi-lateral initiatives to make the world safe from plutonium. NCI, although small in size, has effectively pursued initiatives against plutonium and HEU commerce in a number of countries, including Japan, Germany, Great Britain, Argentina, Brazil, and in en-route states like Panama.

In 1982, NCI proposed and won enactment of a ban on the use of U.S. civilian spent fuel from civilian nuclear power plants as a source of plutonium for weapons (the Hart-Simpson-Mitchell Amendment).

In 1983, NCI commissioned a study, "World Inventories of Civilian Plutonium and the Spread of Nuclear Weapons" by David Albright, the first definitive analysis of the amounts of civilian plutonium accumulating in the world.

In 1985, NCI convened an international conference on the threat of nuclear terrorism, and then established the International Task Force on Prevention of Nuclear Terrorism. The Task Force's findings in 1986 contributed to enactment of a law to combat nuclear terrorism (the Omnibus Diplomatic Security and Anti-Terrorism Act of 1986). Two books that emerged from that project remain the definitive, non-classified work on the subject.

In 1987, NCI helped win enactment of the Murkowski Amendment, which blocked air shipments of plutonium from Europe to Japan after NCI disclosed the secret failure of a test to prove a crash-worthy plutonium shipping cask.

In 1988, NCI assembled a group of world-class scientists to promote the "Tritium Factor" approach to nuclear disarmament, using tritium's relatively fast decay to pace U.S.-Soviet arms reductions and thereby facilitate the shutdown of all military production reactors—the situation that effectively prevails in the United States today.

In 1989, NCI convened a Montevideo conference of Argentine, Brazilian and U.S. nuclear officials and experts that developed proposals which were incorporated into the treaty signed the following year to end the Argentine-Brazilian nuclear arms race.

In 1990, NCI commissioned a study by a former U.S. nuclear-weapons designer (the late Carson Mark) that resulted in the first formal acknowledgement by the head of the International Atomic Energy Agency that nuclear weapons could be made from civilian "reactor-grade" plutonium.

In 1991, NCI correctly predicted that Iraq would violate IAEA safeguards and divert civilian nuclear research reactor fuel for the purpose of making nuclear weapons.

In 1992, NCI helped win enactment of export controls (the Schumer Amendment) barring U.S. transfers of highly enriched, bomb-grade uranium (HEU) to research reactors that could make use of newly developed, low-enriched uranium (LEU) fuel unsuitable for weapons. As a result, U.S. exports of HEU have been nearly eliminated, and most of the hold-out reactors in Europe have agreed to convert to LEU fuel.

In 1993, NCI, in collaboration with the California-based Committee to Bridge the Gap, succeeded in a 10-year effort to persuade the Nuclear Regulatory Commission to promulgate a rule to protect nuclear power plants against truck bombs. The truck-bomb rule took effect the following year, and NCI has since been petitioning NRC to upgrade this rule as well as upgrade protection against other forms of terrorist attack and sabotage.

In 1994, NCI forced a \$100 million cleanout and audit of a plutonium fuel fabrication plant in Japan after disclosing a 70-kilogram discrepancy, equivalent to a dozen nuclear weapons. NCI also prepared a detailed economic analysis showing that Japan could guarantee its energy security by establishing a strategic reserve of non-weapons-usable uranium at a fraction of the cost of their plutonium fuel and breeder program.

In 1996, NCI was invited to make expert technical and legal presentations before the International Maritime Organization in London on safety and security shortcomings in the sea transport of radioactive materials. Since then, NCI has worked closely with coastal states in opposition to plutonium and radioactive waste shipments from Europe to Japan.

Also in 1996, NCI uncovered a secret dispute within the U.S. Executive Branch over the Department of Energy's plan to turn most surplus military plutonium into mixed-oxide (MOX) fuel for nuclear power plants and drew nationwide attention to this dangerous program.

Today, NCI continues to advocate disposal of military plutonium directly as waste and to oppose its use as civilian reactor fuel. NCI also pursues stronger security over transport, storage and use of civilian plutonium and bomb-grade uranium, while pressing for elimination of these dangerous civilian nuclear fuels.